

FR 2,393,570

FR 2 393 570

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Code: 5000-77641

FRENCH PATENT APPLICATION

REPUBLIC OF FRANCE
NATIONAL INSTITUTE OF INDUSTRIAL PROPERTY
PARIS
PATENT NO. 2 393 570

Int. Cl. ² :	A 61 K	7/06
Filing No.:	7717603	
Filing Date:	June 8, 1977	4:24 p.m.
Date of Publication of the Application:	B.O.P.I. - "Listes," No. 1 of January 5, 1979	

HAIR LOTION

Applicant:	Antoine Acquaviva, residing in France
Holder:	Same as Applicant
Representative:	Plasseraud Law Firm

The invention concerns a hair lotion. It relates more specifically to a lotion that is used to slow hair loss and to stabilize the volume of the hair in subjects, notably males, who have a tendency to become locally or completely bald.

Numerous lotions of this type already exist, containing in a hydroalcoholic medium, whose alcohol content is generally 50-55% by volume, various ingredients that are thought to have a protective action against excessive hair loss.

The hair lotion according to the invention, which is notably intended for direct application to the scalp, consists of a water-alcohol solution, characterized by an ethyl alcohol proportion of more than 60% by volume, without reaching the proportion which would produce the slightest sensation of discomfort at the level of the skin due to a low salt content, and by a

content of a thickener which is lower than that which would produce a sticky effect with regard to the hair, but such that the combined proportions of the salt and of the thickener can allow a clear slowing of the evaporation of the alcohol after application to the scalp, without completely eliminating it.

The lotion according to the invention also presents the double advantage of causing the disappearance of dandruff and of slightly sheathing the hair, thus facilitating hair dressing without exerting any harmful effects on the scalp or on the hair itself.

The other constituents of the lotion are chosen notably as a function of their ability to slow the evaporation of the alcohol, without eliminating it.

This result is notably achieved when one uses for this purpose the combined actions of a low content of salt in the lotion, notably sodium chloride, and of a thickener which is soluble in the medium.

Advantageously, the salt content is, compared to the water content of the lotion, in a proportion of 9 g of sodium chloride per liter of water, that is, a proportion corresponding to that of isotonic aqueous saline solutions.

Because of this isotonicity, the lotion presents a degree of compatibility which is particularly advantageous with the scalp. The salt not only contributes to the delaying action with respect to the evaporation of the alcohol, it also accentuates the "wetting" character of the lotion. The uniform application of the lotion to the entire area of the scalp is consequently facilitated.

The content of thickener, which contributes jointly with the isotonic aqueous solution to slowing the rate of evaporation of the alcohol, must remain less than that which would have the effect of creating sticky points between the hairs, as results from hair lacquers of the type which are atomized onto the hair, notably in aerosol form.

In one of its preferred embodiments, the lotion according to the invention is thus characterized by an ethyl alcohol content on the order of 60-65% by volume, by a salt content, notably sodium chloride content, on the order of 2-7 g per liter, and by a content of 3-10 g per liter of a natural or synthetic thickener polymer, such as polyvinylpyrrolidone, which is soluble in the hydroalcoholic medium.

One can add to the base solutions described above, if one desires, all the usual adjuvants used in the case of hair lotions, such as, for example, a perfume or a dye.

In this manner, a lotion is obtained which also induces a slight thickening effect on the hair, thus facilitating hair dressing.

As an example, a typical hair lotion according to the invention is described below, containing per 100 cm³ of lotion:

- a) 60-65 cm³ of ethyl alcohol,
- b) 0.3-1.0 g of polyvinylpyrrolidone, and

c) a physiological solution of sodium chloride (isotonic physiological saline having the formula listed in the Codex) to bring the volume to 100 cm³.

Preparation example

70 cm³ of medicinal alcohol at 90° are mixed with 30 cm³ of isotonic physiological saline (Codex formula). In this manner, a solution is obtained whose alcohol content is 63°. 0.50 g of polyvinylpyrrolidone is dissolved in this solution.

The solution obtained is clear and colorless.

It can be stored for several months without undergoing degradation.

Results of the tests performed with the lotion according to the invention

A person of the male sex applied the lotion described in the preceding example for three successive years at the rate of one application every two days, by practicing a slight dabbing. The hair follicles lost by this person had been counted each day for the seven years preceding the start of the treatment, and this count was continued for the three years after the start of the treatment.

It was observed that, whereas the number of hair follicles lost during each one of the first seven years was greater than 10,000, these numbers gradually dropped to 7000 for the third year after the beginning of the treatment. This person then also became aware of the fact that the overall volume of the hair had now stabilized (because of the apparently complete replacement of lost hair follicles by new hair follicles).

It was also observed that the lotion facilitated hair dressing and that the hair stayed in place better.

During the application of the lotion, one feels a pleasant sensation of freshness due to the slow evaporation of the alcohol. The sensation is prolonged by the combined action of the physiological saline and the polyvinylpyrrolidone, which slow the evaporation of the alcohol and thus keep it in contact with the scalp longer.

In another individual of the female sex, the complete disappearance of dandruff was observed, as well as an improved appearance of the hair.

Naturally, and as already results from the preceding description, the invention is in no way limited to those of its application methods and embodiment which are more specifically considered; on the contrary, it covers all the variants.

Claims

1. Hair lotion, notably for direct application to the scalp, consisting of a hydroalcoholic solution, characterized by a proportion of alcohol larger than 60% by volume, which proportion

must, however, not reach the one which could produce an irritating effect for the skin; by a low content of salt imparting a wetting character to the lotion, without reaching the content which would produce the slightest sensation of discomfort at the level of the skin; and by a content of a thickener which is less than that which would produce a sticky effect with respect to the hair, but such that the combined proportions of the salt and of the thickener can allow a clear slowing of the evaporation of the alcohol after application to the scalp, without completely eliminating the evaporation.

2. Lotion according to Claim 1, characterized by an ethyl alcohol content on the order of 60-65% by volume, by a salt content, notably sodium chloride content, on the order of 2-7 g per liter, and by a content of a natural or synthetic thickener polymer such as polyvinylpyrrolidone, which is soluble in the water-alcohol medium, of 3-10 g per liter.

3. Lotion according to Claim 2, characterized by a content of sodium chloride such that the content is, with respect to the water content of the solution, in a proportion on the order of 9 g of sodium chloride for 1 L of water.

4. A hair lotion according to any one of Claims 1-3, characterized by the fact that it essentially comprises, for 100 cm³:

- a) 60-65 cm³ of ethyl alcohol,
- b) 0.3-1.0 g of polyvinylpyrrolidone, and
- c) isotonic physiological saline (9 g of sodium chloride per 1000 mL) to bring up the volume to 100 cm³.

5. Hair lotion, characterized by the fact that it is obtained from 70 cm³ of 90° medicinal alcohol, 30 cm³ of isotonic physiological saline, and 0.5 g of polyvinylpyrrolidone.

6. Lotion according to any one of Claims 1-5, characterized by the fact that it comprises, in addition, one or more of the usual adjuvants in hair lotions, such as a perfume or a dye.

7. Application of the hair lotion according to any one of Claims 1-6 to slow hair loss and stabilize the volume of the hair.

8. Application of the hair lotion according to any one of Claims 1-6 to treat hair with dandruff.

7. Application de la lotion capillaire selon l'une quelconque des revendications 1 à 6 au freinage de la chute des cheveux et à la stabilisation du volume de la chevelure.

5 8. Application de la lotion capillaire selon l'une quelconque des revendications 1 à 6 au traitement des cheveux présentant des pellicules.

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